PN-ACC-601

CIHI Country Health Profile Series

ANGOLA

Health Statistics Report
1996

ANGOLA

Health Statistics Report
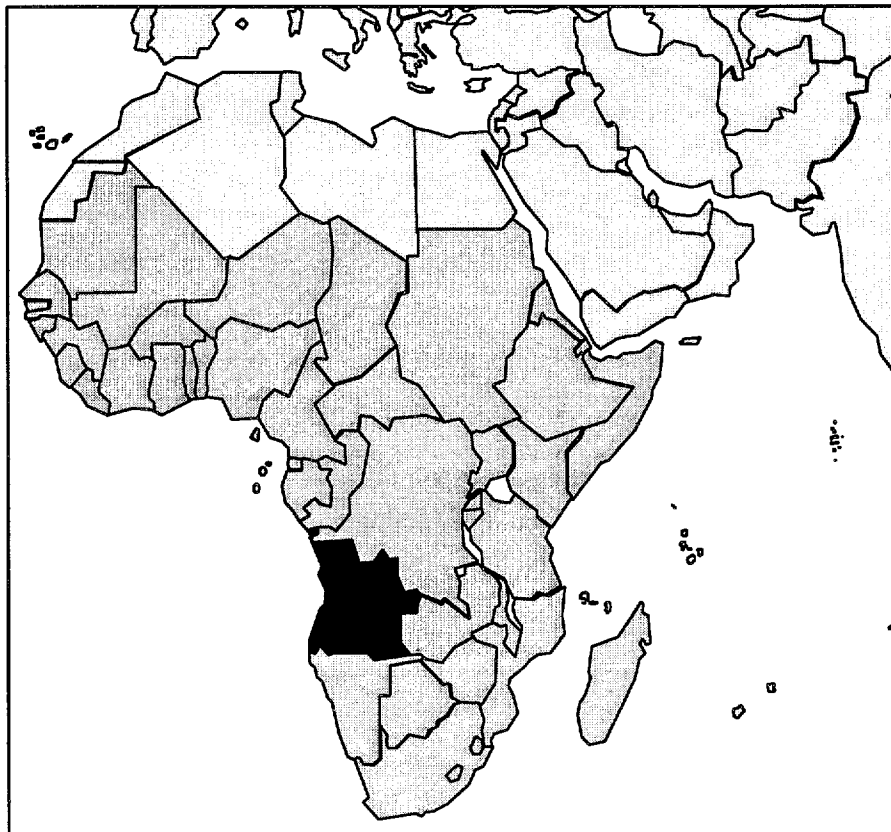
This is part of a series of Country Health Profiles produced by the Center for International Health Information (CIHI). Each profile provides quantitative data on current health and demographic conditions in a developing country. Profile information is compiled from CIHI's databases and reference library and through research and analysis of other data sources.

CIHI's Health Statistics Reports are intended to provide data in a concise format for individuals and organizations involved in health sector policy and decision-making. Contact CIHI at the address on the preceding page for information on the availability of country health profiles and health statistics reports, or look for these reports on the Internet at the following address: *www.cihi.com.*

In order to enable CIHI to report the most current health and demographic data, readers are encouraged to provide any more recent or more accurate information by contacting the center directly or through USAID's Office of Health and Nutrition.

EDITOR'S NOTES

1. Data Notes. For definitions of indicators and commentary regarding their derivation, the reader is referred to Section II.

2. References & Sources. Sources in this profile are referred to by a seven-digit code. Generally, the first three letters refer to a source institution, the following two numbers refer to the year of publication or transmittal, and the final two numbers uniquely identify the individual source. A complete list of sources appears in Section III.

3. Comparative Graphs and Tables. Unless otherwise specified, indicator values for country groupings are median values for the countries in each aggregate grouping for which data are available. Regional groupings include: (1) Sub-Saharan Africa, which includes the 47 countries comprising USAID's Africa Region; (2) No. Africa & Mideast, which corresponds to USAID's Near East Sub-region and includes 21 countries from Morocco in the West to Afghanistan in the East; (3) Asia, which corresponds to USAID's Asia Sub-region and includes 24 developing countries from Pakistan eastward; (4) Latin Am. & Carib. which includes 46 countries of Central and South America and the Caribbean and corresponds to USAID's Latin America and Caribbean region. Income groupings are based on the classifications used by the United Nations' *Human Development Report 1995*, which are defined as: (1) Low -Income Countries (GNP per capita =$696 or less), (2) Middle-Income Countries (GNP/capita $696-$8,625); (3) High-Income Countries (GNP/capita >$8,625). "Developing Countries" indicators are based on 107 countries which are not regarded as "Established Market Economies" by the World Bank's *World Development Report 1994*.

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I: HEALTH & DEMOGRAPHIC OVERVIEW
Current Demographic and Health Indicators

Demographic Indicators			
INDICATOR	VALUE	YEAR	SOURCE
Total population (000s)	10,070	1995	BUC9401
Urban percent	32	1995	UNP9400
Women ages 15-49 (000s)	2,209	1995	CAL9602
Infant mortality rate	140	1995	JEE9503
Under 5 mortality rate	242	1995	BUC9302
Maternal mortality rate	1,500	1990	UNI9601
Life expectancy at birth	48	1995	UNP9400
Number of births (000s)	502	1995	CAL9603
Annual infant deaths (000s)	70	1995	CAL9604
Total fertility rate	6.5	1995	PRB9601

Child Survival Indicators			
INDICATOR	VALUE	YEAR	SOURCE
Vaccination Coverage (%)			
BCG	40	1995	WHE9601
DPT3	21	1995	WHE9601
Measles	32	1995	WHE9601
Polio 3	23	1995	WHE9601
TT2+	14	1995	WHE9601
DPT drop out rate	NA		
Oral Rehydration Therapy (%)			
ORS access rate	60	1992	WHD9300
ORT use rate	48	1991	WHD9201
Contraceptive Prevalence (%)			
CPR, modern methods	NA		
CPR, all methods	NA		
Nutrition (%)			
Adequate nutritional status	NA		
Exclusive breastfeeding	NA		
Complementary feeding	NA		
Continued breastfeeding	NA		

Other Health Indicators			
INDICATOR	VALUE	YEAR	SOURCE
HIV Prevalence			
Adults (per 100,000)	1,040	1994	WHO9601
Access to Improved Water (%)			
Urban	71	1991	JMP9301
Rural	20	1991	JMP9301
Access to Sanitation (%)			
Urban	25	1991	JMP9301
Rural	15	1991	JMP9301
Delivery Conditions			
Deliveries by trained attendants (%)	15	1984	WHM9115

NA = Not available

Trends in Selected Demographic and Health Indicators

INDICATOR	1960	1965	1970	1975	1980	1985	1990	1995	2000	SOURCE
Infant Mortality Rate	232	218	204	191	179	167	154	140	126	JEE9503
Under 5 Mortality Rate	413	386	361	337	314	291	267	242	218	BUC9302
Crude Birth Rate	49	49	49	49	50	51	51	50	47	UNP9400
Crude Death Rate	31	29	27	25	24	22	20	18	16	UNP9400
Avg Annual Growth	1.6	1.5	1.7	2.3	2.7	2.7	3.3	3.5	3.2	UNP9400
Total Fertility Rate	6.4	6.4	6.5	6.7	6.9	7.1	7.2	7.0	6.4	UNP9400

INFANT & UNDER 5 MORTALITY RATES

CRUDE BIRTH & CRUDE DEATH RATES
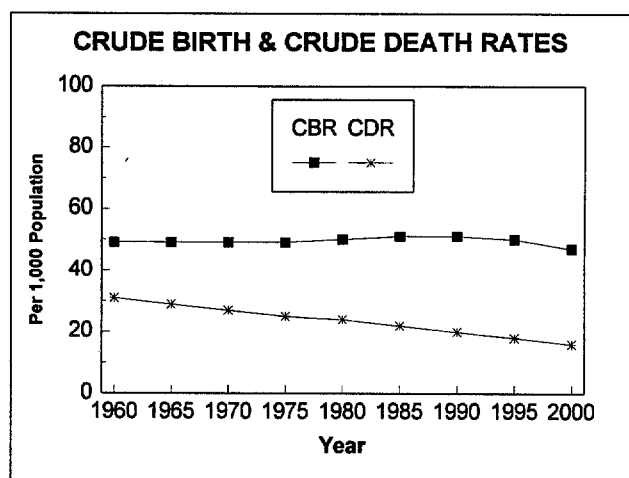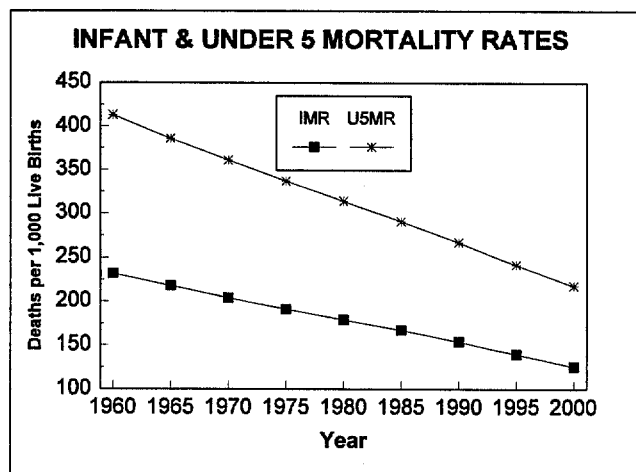
IMR and TFR

The relationship between IMR and TFR is currently a subject under review by the scientific community. While there is not conclusive evidence that the IMR and TFR are causally linked and necessarily decline together, there is empirical evidence for suspecting that such a reinforcing relationship exists as the pattern is observable in most countries.

INFANT MORTALITY & TOTAL FERTILITY RATES
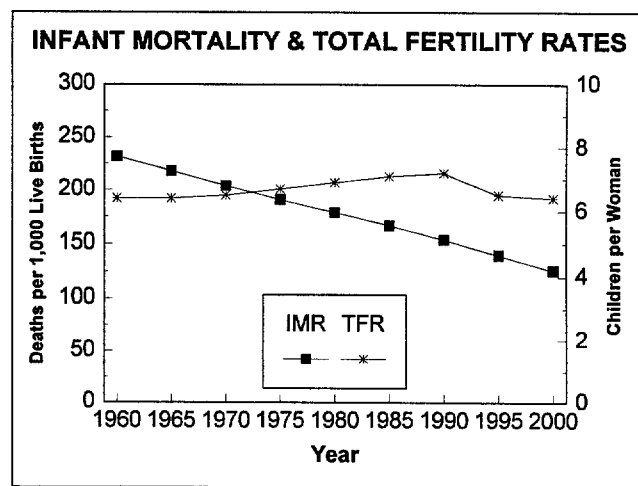
Population Estimates/Pyramid

POPULATION ESTIMATES		
YEAR	VALUE	SOURCE
1960	4,797,344	BUC9401
1965	5,134,818	BUC9401
1970	5,605,626	BUC9401
1975	5,891,843	BUC9401
1980	6,793,600	BUC9401
1985	7,571,650	BUC9401
1990	8,429,910	BUC9401
1995	10,069,500	BUC9401
2000	11,513,500	BUC9401

POPULATION ESTIMATES
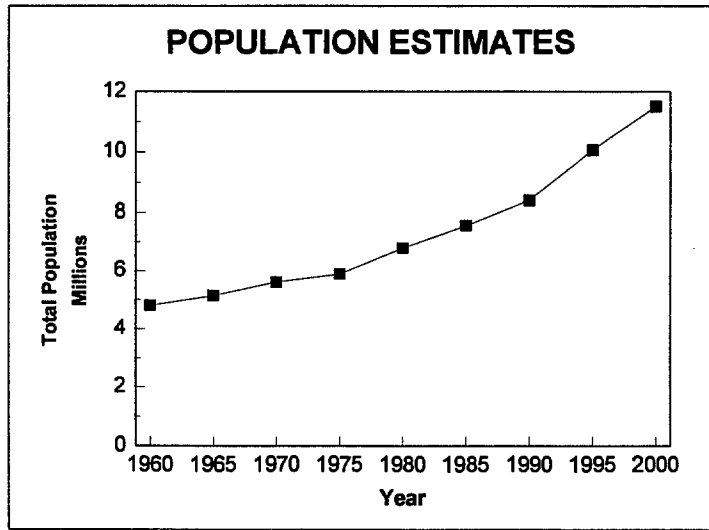
CURRENT & PROJECTED POPULATION
By Age & Sex: 1995 & 2020
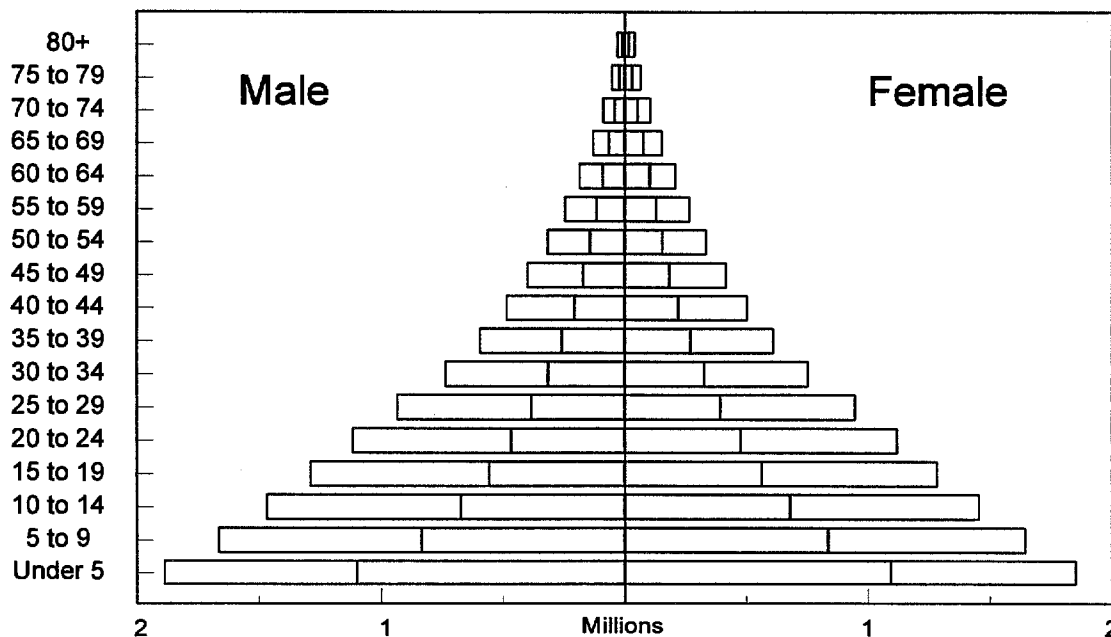
Source: UNP9400

□ 1995 □ 2020

Trends in Selected Health and Child Survival Indicators
Vaccination Coverage Rates

BCG VACCINATION COVERAGE
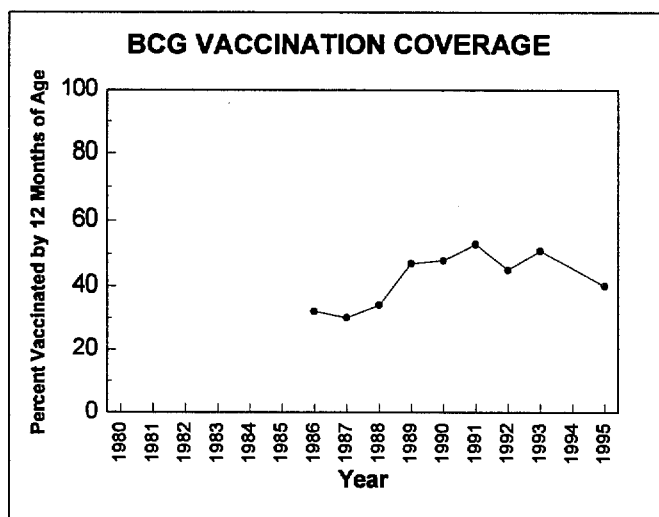
BCG COVERAGE		
YEAR	PERCENT	SOURCE
1980	NA	
1981	NA	
1982	NA	
1983	NA	
1984	NA	
1985	NA	
1986	32	WHE9100
1987	30	WHE9100
1988	34	WHE9100
1989	47	WHE9100
1990	48	WHE9200
1991	53	WHE9202
1992	45	WHE9401
1993	51	WHE9501
1994	NA	
1995	40	WHE9601

DPT3 VACCINATION COVERAGE
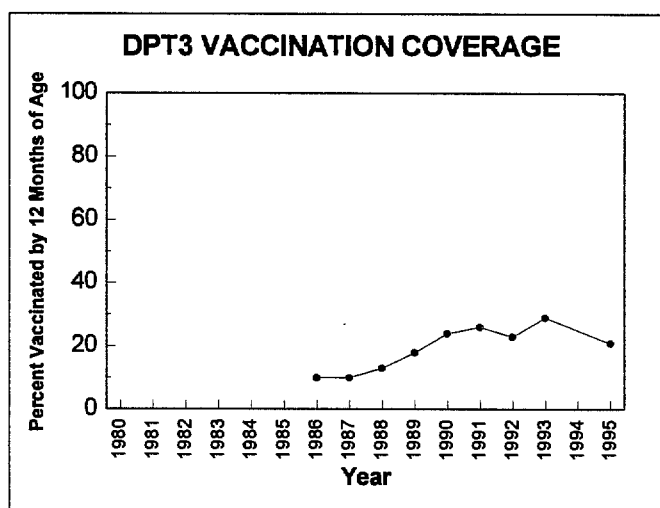
DPT3 COVERAGE		
YEAR	PERCENT	SOURCE
1980	NA	
1981	NA	
1982	NA	
1983	NA	
1984	NA	
1985	NA	
1986	10	WHE9100
1987	10	WHE9100
1988	13	WHE9100
1989	18	WHE9100
1990	24	WHE9200
1991	26	WHE9202
1992	23	WHE9401
1993	29	WHE9501
1994	NA	
1995	21	WHE9601

MEASLES VACCINATION COVERAGE
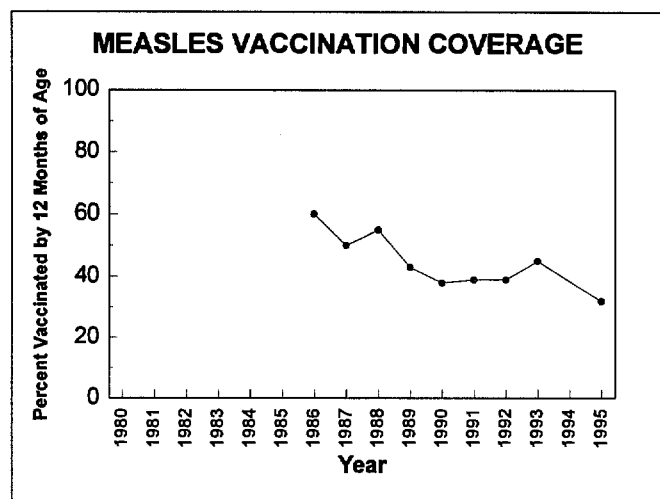
MEASLES COVERAGE		
YEAR	PERCENT	SOURCE
1980	NA	
1981	NA	
1982	NA	
1983	NA	
1984	NA	
1985	NA	
1986	60	WHE9100
1987	50	WHE9100
1988	55	WHE9100
1989	43	WHE9100
1990	38	WHE9100
1991	39	WHE9202
1992	39	WHE9401
1993	45	WHE9501
1994	NA	
1995	32	WHE9601

Vaccination Coverage Rates, continued

POLIO3 VACCINATION COVERAGE
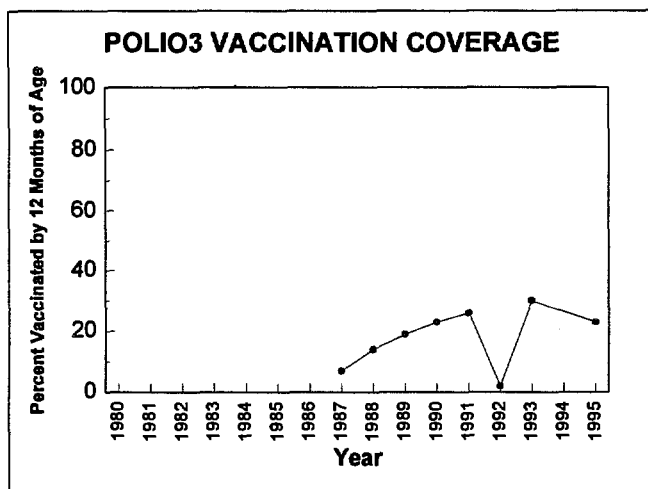
POLIO3 COVERAGE		
YEAR	PERCENT	SOURCE
1980	NA	
1981	NA	
1982	NA	
1983	NA	
1984	NA	
1985	NA	
1986	NA	
1987	7	WHE9100
1988	14	WHE9100
1989	19	WHE9100
1990	23	WHE9100
1991	26	WHE9202
1992	2	WHE9401
1993	30	WHE9501
1994	NA	
1995	23	WHE9601

TT2+ VACCINATION COVERAGE
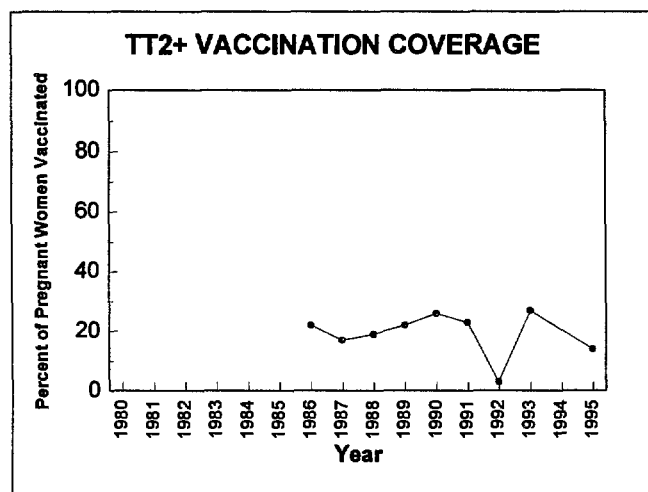
TT2+ COVERAGE		
YEAR	PERCENT	SOURCE
1980	NA	
1981	NA	
1982	NA	
1983	NA	
1984	NA	
1985	NA	
1986	22	WHE9100
1987	17	WHE9100
1988	19	WHE9100
1989	22	WHE9100
1990	26	WHE9100
1991	23	WHE9202
1992	3	WHE9401
1993	27	WHE9501
1994	NA	
1995	14	WHE9601

ORT Use Rate
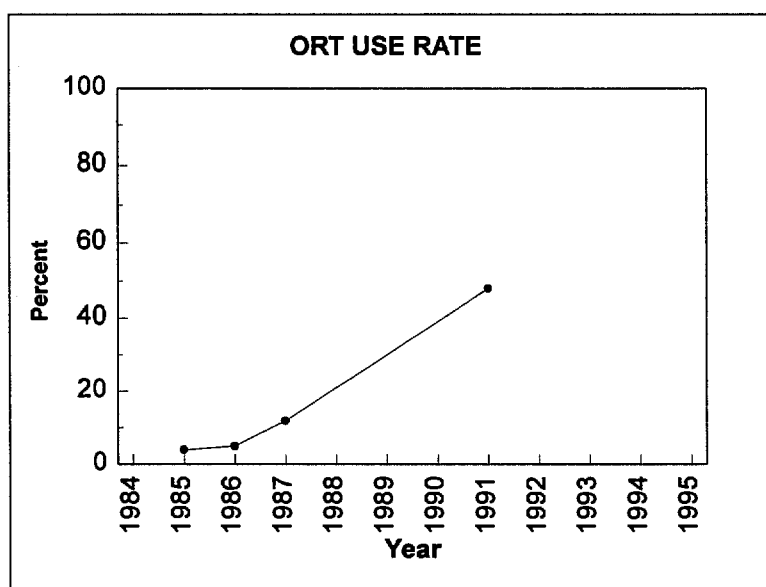
ORT USE RATE

ORT USE RATE		
YEAR	PERCENT	SOURCE
1984	NA	
1985	4	WHD8700
1986	5	WHD8800
1987	12	WHD8900
1988	NA	
1989	NA	
1990	NA	
1991	48	WHD9201
1992	NA	
1993	NA	
1994	NA	
1995	NA	

Access to Potable Water

ACCESS TO POTABLE WATER

(Chart showing Percent vs Year, 1980–1995, with RURAL and URBAN series)
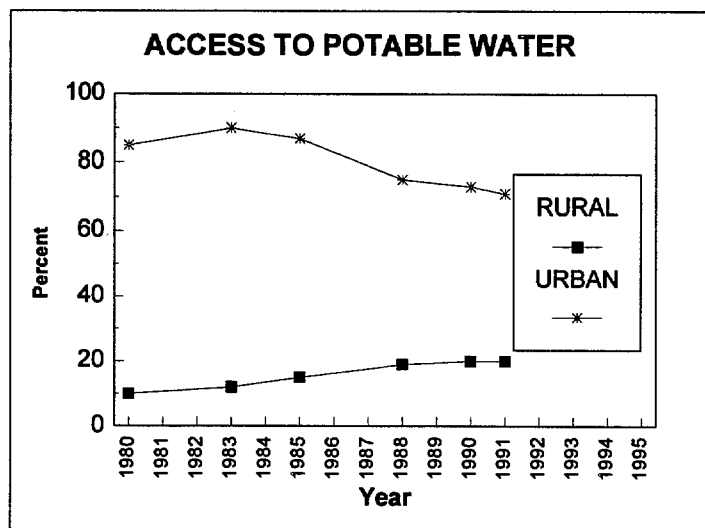
YEAR	RURAL	SOURCE	URBAN	SOURCE
1980	10	WHO9101	85	WHO9101
1981	NA		NA	
1982	NA		NA	
1983	12	WHO9101	90	WHO9101
1984	NA		NA	
1985	15	WHO9101	87	WHO9101
1986	NA		NA	
1987	NA		NA	
1988	19	WHO9101	75	WHO9101
1989	NA		NA	
1990	20	WHO9200	73	WHO9200
1991	20	JMP9301	71	JMP9301
1992	NA		NA	
1993	NA		NA	
1994	NA		NA	
1995	NA		NA	

Access to Adequate Sanitation

ACCESS TO ADEQUATE SANITATION

(Chart showing Percent vs Year, 1980–1995, with RURAL and URBAN series)
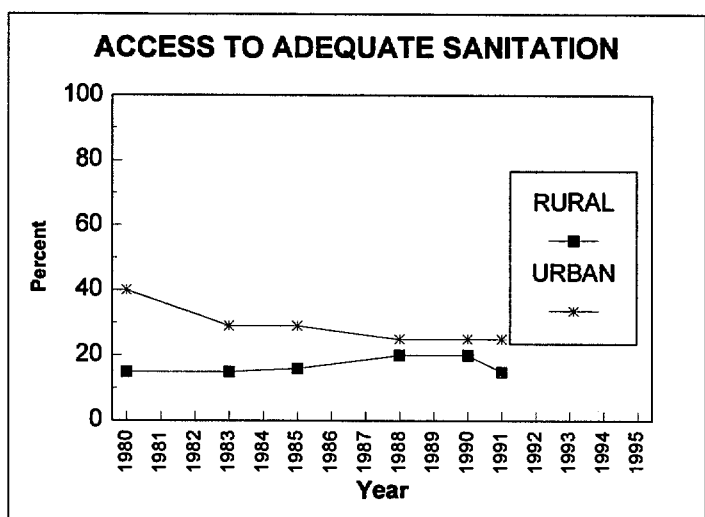
YEAR	RURAL	SOURCE	URBAN	SOURCE
1980	15	WHO9101	40	WHO9101
1981	NA		NA	
1982	NA		NA	
1983	15	WHO9101	29	WHO9101
1984	NA		NA	
1985	16	WHO9101	29	WHO9101
1986	NA		NA	
1987	NA		NA	
1988	20	WHO9101	25	WHO9101
1989	NA		NA	
1990	20	WHO9200	25	WHO9200
1991	15	JMP9301	25	JMP9301
1992	NA		NA	
1993	NA		NA	
1994	NA		NA	
1995	NA		NA	

COMPARATIVE INDICATORS
Comparative Infant Mortality Rates

INFANT MORTALITY RATES, 1960 & 1995
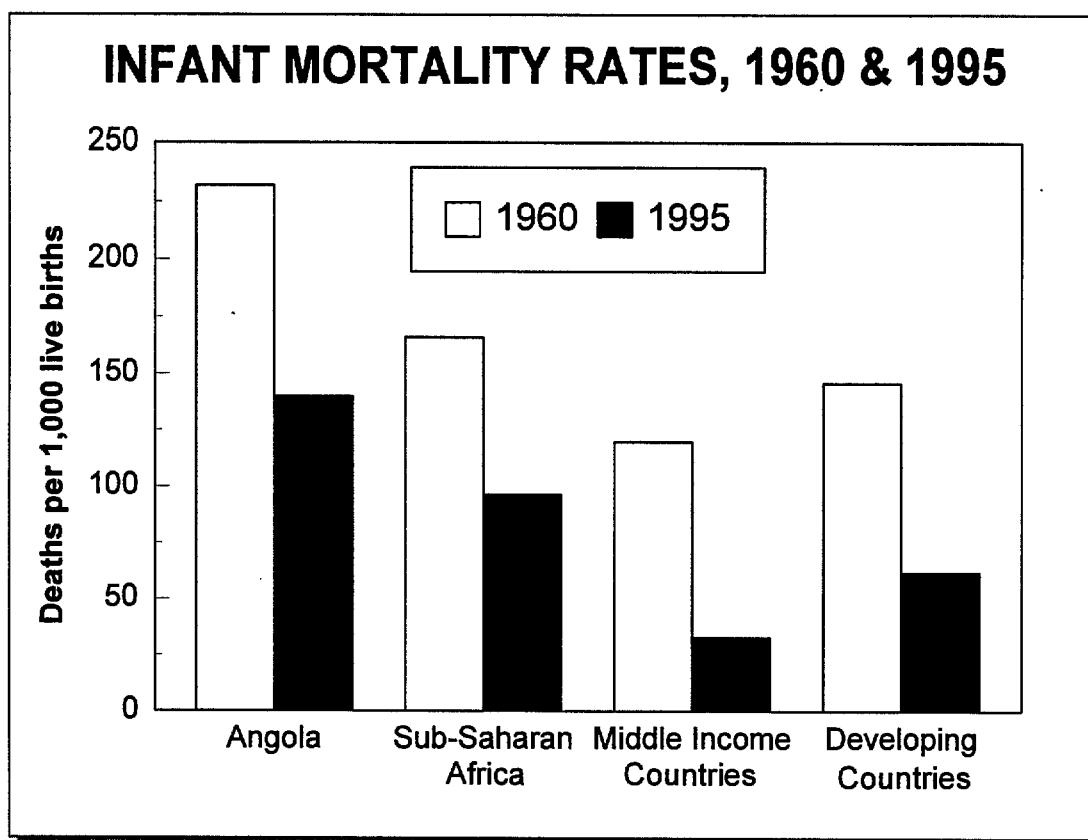
YEAR	1960	1995	Source
Angola	232	140	JEE9503
Median values for country groupings:			
Sub-Saharan Africa	166	97	CAL9606
Middle Income Countries	120	33	CAL9606
Developing Countries	146	62	CAL9606

Comparative Vaccination Coverage Rates

VACCINATION COVERAGE

Angola | Sub-Saharan Africa
Middle Income Countries | Developing Countries
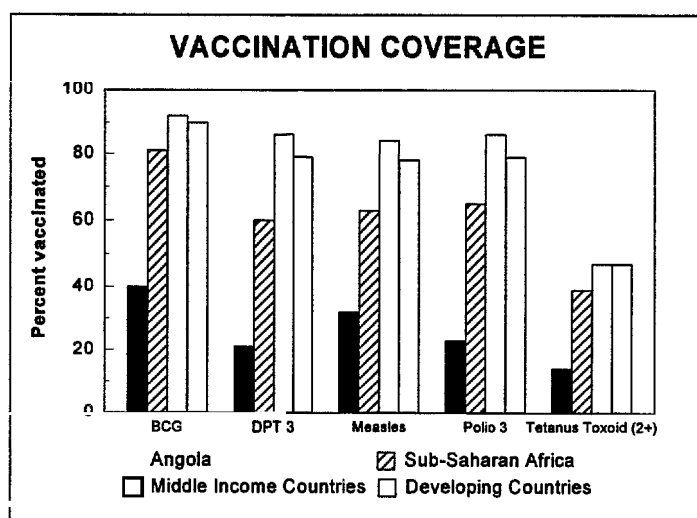
				Median values for country groupings: (CAL9606)		
Vaccination Coverage	Angola	Year	Source	Sub-Saharan Africa	Middle Income Countries	Developing Countries
BCG	40	1995	WHE9601	81	92	90
DPT 3	21	1995	WHE9601	60	86	79
Measles	32	1995	WHE9601	63	84	78
Polio 3	23	1995	WHE9601	65	86	79
Tetanus Toxoid (2+)	14	1995	WHE9601	39	47	47

Comparative ORT Use Rates
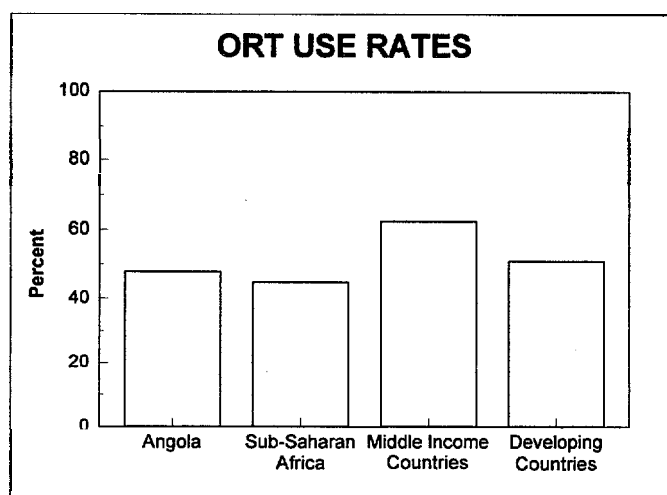
ORT USE RATES

COUNTRY	ORT USE RATE	YEAR
Angola	48	1991
Source	WHD9201	
Median values for country groupings:		
Sub-Saharan Africa	45	1995
Middle Income Countries	63	1995
Developing Countries	51	1995
Source	CAL9606	

Human Immunodeficiency Virus (HIV) Prevalence Rates

HIV PREVALENCE AMONG ADULT POPULATION
Provisional working estimates by WHO

% HIV Positive, end of 1994

20%	
	17.4%
15%	
10%	
	6.5%
5%	3.7%
	1.0%
0%	
	Angola Namibia Zaire Zambia

Source: WHO9601
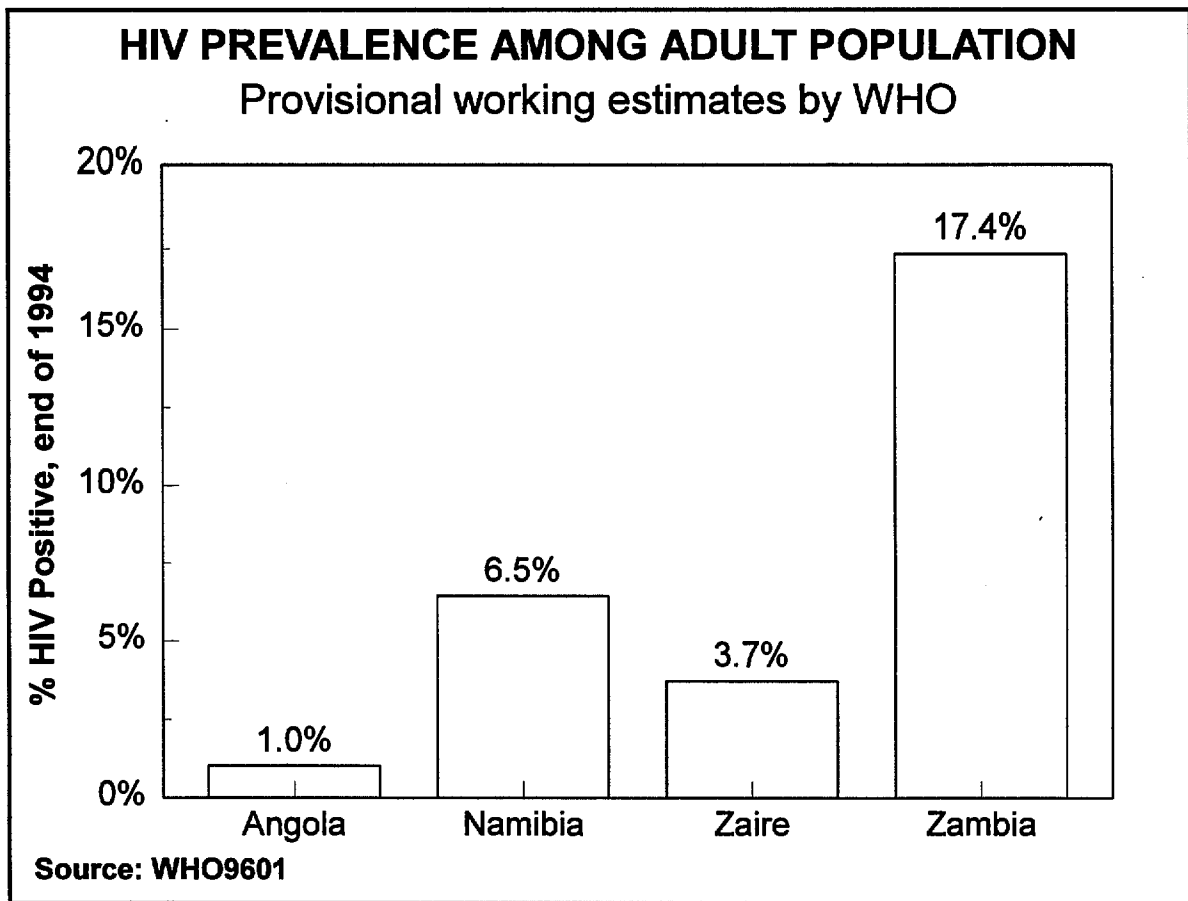
II: DATA NOTES

I. Note On Mortality Estimation

Various organizations produce mortality estimates for the developing countries and regions. The three largest sources are the United Nations Population Division, the World Bank and the United States Bureau of the Census. CIHI's Health Statistics Database draws upon the work of these three larger organizations as well as other sources in order to reconcile the various estimates and provide the most reasonable current and historical estimates available.

CIHI has also created the only comprehensive time series of under-five mortality estimates for all developing countries. This has been accomplished by developing mathematical equations from empirical data that describe the relationship between infant and under-five mortality. Using these equations it is possible to make estimates of under-five mortality from infant mortality or *vice-versa*. More details regarding CIHI's methodology for specific data sets are provided in the source references.

II. Definitions

Demographic indicators:

Annual Infant Deaths: An estimate of the number of deaths occurring to children under age one in a given year.
Average Annual Rate of Population Growth: An estimate of the rate at which a population is increasing (or decreasing) in a given year.
Children Under Age 1: Mid-year estimate of the total number of children under age one.
Contraceptive Prevalence Rate: Estimate of the proportion of women

aged 15 through 44 (sometimes 15 through 49) currently using a modern method of contraception. For some countries, this data is only available for women in union or married. Where sources fail to distinguish modern and traditional methods, the combined rate is shown.
Crude Birth Rate: An estimate of the number of live births per 1,000 population in a given year.
Crude Death Rate: An estimate of the number of deaths per 1,000 population in a given year.
Infant Mortality Rate: The estimated number of deaths in infants (children under age one) in a given year per 1,000 live births in that same year. This rate may be calculated by direct methods (counting births and deaths) or by indirect methods (applying well-established demographic models).
Life Expectancy At Birth: An estimate of the average number of years a newborn can expect to live. Low life expectancies in developing countries are in large part due to high infant mortality.
Maternal Mortality Rate (or Ratio): Estimated number of maternal deaths per 100,000 live births where a maternal death is one which occurs when a woman is pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management. Extremely difficult to measure, maternal mortality can be derived from vital registration systems (usually underestimated), community studies and surveys (requires very large sample sizes) or hospital registration (usually overestimated).
Total Population: Mid-year estimate of total number of individuals in a country.
Total Fertility Rate: Estimate of the average number of children a woman

would bear during her lifetime given current age-specific fertility rates.
Under 5 Mortality Rate: The estimated number of children born in a given year who will die before age five per 1,000 live births in that same year. May be calculated by direct or indirect methods.
Urban Population: Population living in urban areas as defined according to the national definiton used in the most recent population census.

Child survival indicators:

Adequate Nutritional Status: An individual child of a certain age is said to be adequately nourished if his/her weight is greater than the weight corresponding to "two Z-scores" (two standard deviations) below the median weight achieved by children of that age. The median weight and the distribution of weights around that median in a healthy population are taken from a standard established by the National Center for Health Statistics, endorsed by WHO. The indicator for the population as a whole is the proportion of children 12 through 23 months of age who are adequately nourished.
Complementary Feeding: An estimate of the proportion of infants six to nine months of age (181 days to 299 days) still breastfeeding but also receiving complementary weaning foods.
Continued Breastfeeding: An estimate of the proportion of children breastfed for at least one year. Values presented in this report are the proportion of children 12 to 15 months of age at the time of the survey still receiving breast milk.
DPT Drop-out Rate: An estimate of the proportion of living children between the ages of 12 and 23 months

who received at least one DPT vaccination but who did not receive the entire series of three vaccinations before their first birthdays.

Exclusive Breastfeeding: An estimate of the proportion of infants less than four months (120 days) of age who receive no foods or liquids other than breast milk.

ORS Access Rate: An estimate of the proportion of the population under age five with reasonable access to a trained provider of oral rehydration salts who receives adequate supplies. This indicator is particularly difficult to measure and may fluctuate dramatically as various methods of estimation are devised.

ORT Use Rate: Estimate of the proportion of cases of diarrhea in children under five treated with **ORS and/or RHF** (a recommended home fluid). ORT use may be determined using administrative means or surveys. Administrative estimates are generally based on estimates of the number of episodes of diarrhea in the target population for a given year and the quantity of ORS available; these estimates are highly sensitive to changes in estimates of the frequency of diarrhea episodes. Surveys more precisely focus on the actual behavior of mothers in treating diarrhea in the two-week period prior to the survey.

Vaccination Coverage In Children: Estimate of the proportion of living children between the ages of 12 and 23 months who have been vaccinated before their first birthday (three times in the cases of polio and DPT and once for both measles and BCG). Rates are calculated in two ways: Administrative estimates are based on reports of the number of inoculations of an antigen given during a year to children who have not yet reached their first birthday divided by an estimate of the pool of children under one year of age eligible for vaccination. Survey estimates are based on samples of children between the ages of 12 and 23 months.

Vaccination Coverage In Mothers: Estimate of the proportion of women in a given time period who have received two doses of tetanus toxoid (TT) during their pregnancies. A revised indicator, referred to as TT2+, is now commonly used to account for the cumulative effect of TT boosters. A woman and her baby are protected against tetanus when a mother has had only one or perhaps no boosters during a given pregnancy so long as the woman had received the appropriate number of boosters in the years preceding the pregnancy in question. (This number varies with number received previously and the time elapsed.) Rates are computed using administrative methods or surveys.

Other health sector indicators:

Access to Adequate Sanitation: Definitions vary over time. In the past, this has been an estimate of the proportion of the population with sanitation service provided through sewer systems or individual in-house or in-compound excreta disposal facilities (latrines). After WHO changed its indicators and definitions in the late 1980s, this is now defined as the proportion with reasonable access to sanitary means of excreta and waste disposal, including outdoor latrines and composting.

Access to Health Services: An estimate of the proportion of the population that can reach appropriate local health services by local means of transport in no more than one hour. Recently WHO has revised its definition to the proportion of the population having treatment for common diseases and injuries and a regular supply of the essential drugs on the national list within one hour's walk or travel.

Access to Safe Water: Proportion of the population with reasonable access to safe water supply, including treated surface waters or untreated but uncontaminated water such as that from springs, sanitary wells or protected boreholes. Reporting can be highly subjective. Varying definitions are used for reasonable access in urban/rural areas:

Access to Safe Water, Urban: Estimate of the proportion of all persons living in urban areas (defined roughly as population centers of 2,000 or more persons) who live within 200 meters of a standpipe or fountain source of water.

Access to Safe Water, Rural: Estimate of the proportion of all persons not living in urban areas with a source of water close enough to home that household members do not spend a disproportionate amount of time fetching water.
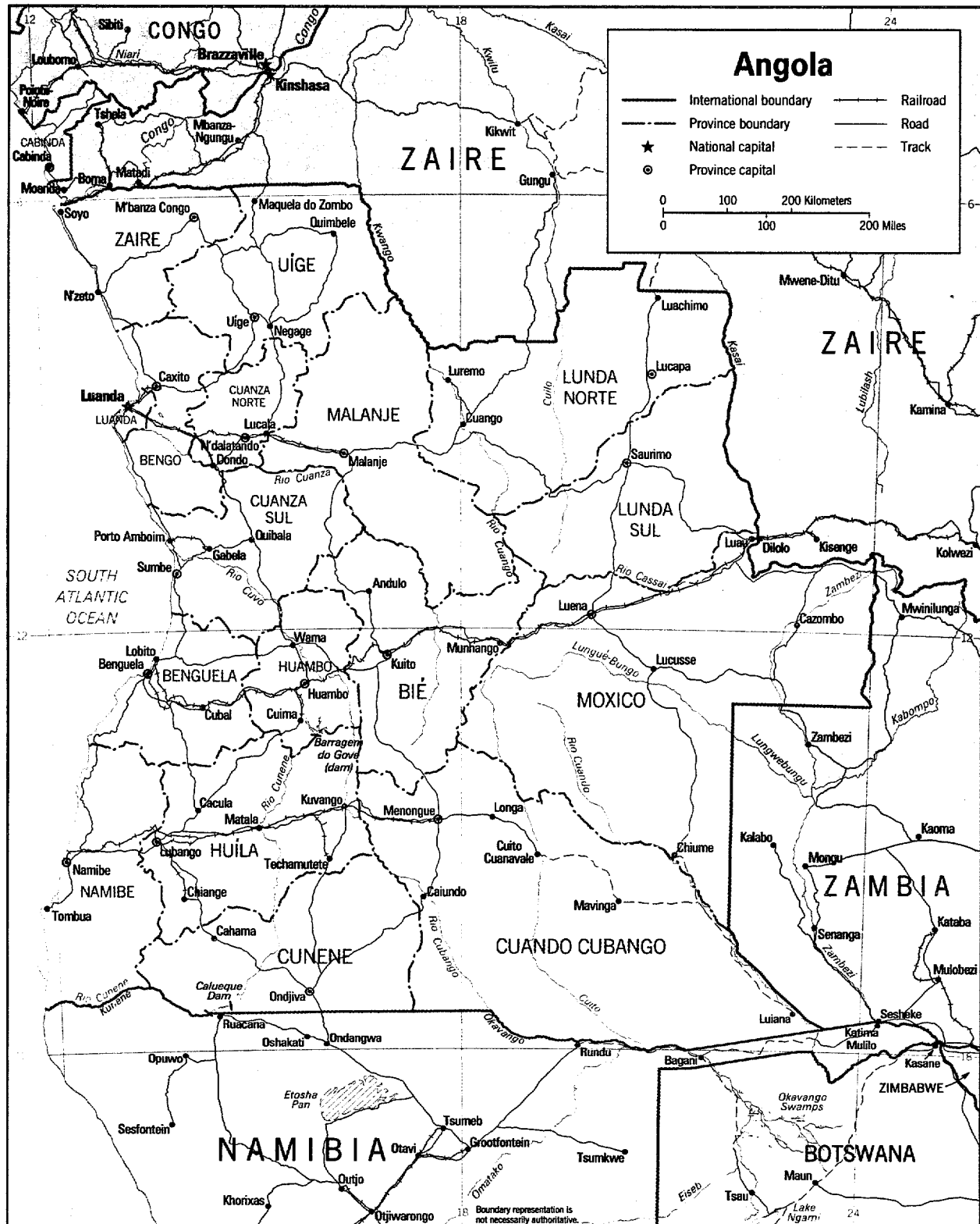
Births Attended by Trained Personnel: An estimate of the proportion of births attended by at least one physician, nurse, midwife, trained primary health care worker, or trained birth attendant.

HIV Prevalence: Estimate of the proportion of a given population infected with HIV.

III: SOURCES

BUC9302 Time series estimates of Infant Mortality generated by applying the ratio of the BUCEN estimate for 1992 to the World Population Prospects estimate for 1992 to the annual values dating back to 1950 as estimated in the World Population Prospects. Under 5 Mortality estimates are calculated by applying the appropriate Coale-Demeny model to the Infant Mortality estimates.

BUC9401 U.S. Bureau of the Census (BUCEN). International Data Base. Version dated March, 1994.

CAL9602 Calculations of the annual number of women in the population ages 15-49. For each country, a percentage was derived from UN data on total population and women 15-49 and the percentage was then applied to the preferred estimate of total population.

CAL9603 Calculated number of live births to women of reproductive years (15-49) in 1995. Calculated from the population multiplied by the crude birth rate for each country.

CAL9604 Calculated number of deaths occuring to children under the age of 1 in a given year (1995). Figures based on the number of births multiplied by the infant mortality rate.

CAL9606 Median value for aggregate of countries. Calculated using most recent preferred indicator values for all countries in the aggregate.

JEE9503 Infant Mortality Rate (1q0) calculated from Under Five Mortality Rate (1q0) using Other Sub-Saharan Africa equation: $1q0 = 0.76248*((5q0)^{0.94896})$.

JMP9301 WHO/UNICEF Joint Monitoring Programme. Water Supply and Sanitation Sector Monitoring Report 1993. Sector Status as of December 1991. WHO and UNICEF. August, 1993.

PRB9601 Population Reference Bureau. World Population Data Sheet, 1996.

UNI9601 United Nations Children's Fund (UNICEF) and World Health Organization (WHO). Revised 1990 Estimates of Maternal Mortality: A New Approach by WHO and UNICEF, April, 1996.

UNP9400 Department of International Economic and Social Affairs, United Nations. World Population Prospects 1994. (Tape) New York: UN, 1994.

WHD8700 World Health Organization. Programme for Control of Diarrhoeal Diseases: Interim Programme Report 1986. (WHO/CDD/87.26) Geneva: WHO, 1987.

WHD8800 World Health Organization. Programme for Control of Diarrhoeal Diseases: Sixth Programme Report 1986-1987. (WHO/CDD/88.28) Geneva: WHO, 1988.

WHD8900 World Health Organization. Programme for Control of Diarrhoeal Diseases: Programme Report (WHO/CDD/89.31) Geneva: WHO, 1989.

WHD9201 Programme For Control Of Diarrhoeal Diseases. Eighth Programme Report 1990-1991. WHO/CDD/92.38. Geneva: World Health Organization, 1992.

WHD9300 World Health Organization, Programme for Control of Diarrhoeal Diseases; provisional data

WHE9100   World Health Organization. Expanded Programme on Immunization Information System Report, April 1991. (WHO/EPI/CEIS/91.1) Geneva: WHO, 1991.

WHE9200   World Health Organization. Expanded Programme on Immunization Information System Report, April 1992. (WHO/EPI/CEIS/92.1) Geneva: WHO, 1992.

WHE9202   World Health Organization. Expanded Programme on Immunization Information System Report, October 1992. (WHO/EPI/CEIS/92.2) Geneva: WHO, 1992.

WHE9401   Download of WHO/EPI vaccination coverage files from INTERNET, March 24, 1994.

WHE9501   Download of WHO/EPI vaccination coverage files from INTERNET, April 6, 1995.

WHE9601   Download from WHO/EPI vaccination coverage files from INTERNET, June 30, 1996.

WHM9115   World Health Organization. World Health Statistics Annual - Vital Statistics and Causes of Death. Geneva: World Health Organization, various years as cited in Division of Family Health, World Health Organization. Maternal Mortality: A Global Factbook. (WHO/MCH/MSM/91.3) Geneva: World Health Organization. 1991.

WHO9101   World Health Organization. World Health Organization Disk: Water Supply and Sanitation Service Coverage. Geneva: WHO, October 29, 1991.

WHO9200   The International Drinking Water and Sanitation Decade, 1981-90: End of decade review, (as of December 1990), August 1992. CWS Unit, Division of Enviromental Health, World Health Organization, 1211 Geneva 27, Switzerland.

WHO9601   World Health Organization, Global Programme on AIDS. The Current Global Situation of the HIV/AIDS Pandemic, 15 December 1995.

Angola

Legend:
- International boundary
- Province boundary
- ★ National capital
- ◉ Province capital
- Railroad
- Road
- Track

0 100 200 Kilometers
0 100 200 Miles

CONGO
Sibiti
Loubomo
Niari
Brazzaville
Kinshasa
Congo
Pointe-Noire
Tshela
CABINDA
Cabinda
Mbanza-Ngungu
Kikwit
Moanda
Boma
Matadi
Soyo
M'banza Congo
Maquela do Zombo
Quimbele
Gungu

ZAIRE
N'zeto
UÍGE
Uige
Negage
Luremo
Caxito
CUANZA NORTE
MALANJE
Luanda
LUANDA
Lucala
Cuango
N'dalatando
Dondo
Malanje
BENGO
Rio Cuanza
CUANZA SUL
Porto Amboim
Quibala
Sumbe
Gabela
Rio Cuvo
Andulo
Wama
SOUTH ATLANTIC OCEAN

LUNDA NORTE
Luachimo
Mwene-Ditu
Lucapa
Cuito
Kasai
ZAIRE
Kamina
Saurimo
Lubilash

LUNDA SUL
Luau
Dilolo
Kisenge
Kolwezi
Rio Cassai
Zambezi
Luena
Cazombo
Mwinilunga

Lobito
Benguela
BENGUELA
HUAMBO
Kuito
Munhango
MOXICO
Lungué-Bungo
Lucusse
Cubal
Huambo
Cuima
BIÉ
Barragem do Gove (dam)
Rio Cunene
Cácula
Kuvango
Matala
Menongue
Longa
Zambezi
Kabompo
Lungwebungu
Kaoma
Kalabo
Mongu
ZAMBIA
Cubango
HUÍLA
Techamutete
Cuito Cuanavale
Zhiume
Namibe
Chiange
Caiundo
Mavinga
NAMIBE
Tombua
Cahama
CUNENE
Rio Cubango
CUANDO CUBANGO
Senanga
Kataba
Mulobezi
Rio Cunene
Calueque Dam
Ondjiva
Ruacana
Oshakati
Ondangwa
Okavango
Rundu
Bagani
Luiana
Seshéke
Katima Mulilo
Kasane
ZIMBABWE
Opuwo
Cuito
Okavango Swamps
BOTSWANA
Etosha Pan
Tsumeb
Sesfontein
Otavi
Grootfontein
Tsumkwe
Maun
NAMIBIA
Outjo
Omatako
Eiseb
Tsau
Lake Ngami
Khorixas
Otjiwarongo

Boundary representation is not necessarily authoritative.

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